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Synthesis of Augmented Reality Use in the Development of English Language Writing Skills

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Abstract: Learning English and mastering its skills is one of the most critical priorities of the current times, as educational policies give great importance to providing students with the skills necessary to learn English, especially the skill of writing, and in the shadows witnessed by the educational system of developments that forced it to keep pace with the technological revolution and employ modern digital technologies, the most important of which are augmented reality technologies because of their enjoyment, fun and attractiveness to the educational process, and its focus on students and its promotion of the self-learning process, and in light of this, The current study aimed to identify the role of augmented reality in the development of the English language. Writing skills of primary school students through theoretical literature and the researcher used the descriptive method. The study found that augmented reality technologies enhance students' motivation to learn and increase the processes of attention and concentration, thus increasing the level of cognitive achievement, and that the techniques of scientific application of writing skills contribute. Therefore, they focus on the learner and enhance self-learning among students, and thus they help learners develop thinking skills, enhance learners' independence, help learners feel more confident, increase learners' motivation to learn writing skills, and reduce obstacles to learning writing skills.

Keywords: enhanced reality, English writing skills.

مراجعة تحليلية في استخدام الواقع المعزز لتنمية مهارات الكتابة باللغة الإنجليزية

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المستخلص: يعد تعلم اللغة الإنجليزية وإتقان مهاراتها من أهم أولويات العصر الحالي، حيث تولي السياسات التعليمية أهمية كبيرة لتزويد الطلاب بالمهارات اللازمة لتعلم اللغة الإنجليزية، وخاصة مهارة الكتابة، وفي الظلال التي يشهدها النظام التعليمي من التطورات التي أجبرتها على مواكبة الثورة التكنولوجية وتوظيف التقنيات الرقمية الحديثة، وأهمها تقنيات الواقع المعزز لما تتمتع به من متعة ومتعة وجاذبية للعملية التعليمية، وتركيزها على الطلاب وتعزيزها عملية التعلم الذاتي، وفي ضوء ذلك هدفت الدراسة الحالية إلى التعرف على دور الواقع المعزز في تطوير اللغة الإنجليزية. مهارات الكتابة لدى طلاب المرحلة الابتدائية من خلال الأدب النظري واستخدم الباحث المنهج الوصفي، والدراسة هي أن تقنيات الواقع المعزز دافع الطلاب للتعلم والزيادة من عمليات الانتباه والتركيز، وبالتالي تزيد من مستوى التحصيل المعرفي، و تساهم تقنيات التطبيق العلمي لمهارات الكتابة، وبالتالي فهي تركز على المتعلم وتعزز التعلم الذاتي بين الطلاب، وبالتالي فهي تساعد المتعلمين على الشعور بثقة أكبر، وتزيد من المتعلمين للتعلم مهارات الكتاب وتقليل العقبات التي تعترض تعلم مهارات الكتابة.

1-Introduction.

The technological revolution witnessed by our time has produced many modern technologies in all fields, which have increased with the advent of the Internet, as it has had a significant impact on the development of education, as e-learning of all kinds has emerged, which is a starting point for digital transformation in the education of future generations, and augmented reality technology is one of the modern applications of e-learning, which educators hope that its effective employment will contribute to improving and improving the teaching and learning processes (Ahmed, 2016),

Augmented reality (AR) is a technology that enhances the real-world environment by adding virtual computer-generated information to it. According to Cypress et al., AR involves placing virtual objects in the real world in real time, creating a unique user experience. AR combines computer-generated data, such as graphics, audio, and video, with the real world. It presents information that cannot be imagined or recognized through normal cognitive processes, thus enhancing reality. In recent years, the use of augmented reality has grown rapidly, especially in academic settings. It is considered one of the most groundbreaking inventions. Han et al. suggest that its popularity stems from its ability to merge the real world with computer-generated content, providing a mediated understanding of reality. (Cypress, P, 2018)

Augmented reality plays a crucial role in education by integrating the real world with virtual teaching materials. This allows learners to acquire information through discovery, which has a positive impact on their learning experience. According to Dunleavy and Dede, augmented reality creates a positive learning environment and enhances constructive learning principles. Numerous studies have demonstrated the value of augmented reality in education, particularly in improving learning achievement. However, there are technical challenges that users may face when using augmented reality. The first widely known application of augmented reality that captured public interest was the invention of Pokémon in 2016. In the context of education, Juan et al. developed an educational augmented reality game to help children learn vocabulary.

This game requires children to correctly place markers representing each letter of the alphabet. Similarly, mobile-based applications are beneficial for English as a Foreign Language (EFL) students as they create an effective English learning environment and improve vocabulary. These applications also contribute to a positive and engaging learning atmosphere. (Dunleavy, M.; Dede, C, 2014)

Augmented reality is one of the contemporary and essential concepts added by information technology, which refers to the integration of the real environment with virtual reality within the real environment, and augmented reality technology is defined as a system that integrates virtual reality environments and real environments through special techniques and methods, and therefore augmented reality technology can be employed in the educational process in order to assist learners in being able to deal with information and perceive it visually easier and more manageable. It also provides meaningful education (Özeren & Top, 2023).

In light of this, Chau and Clement (2014) emphasize that augmented reality technology helps teacher's master teaching skills through virtual educational situations.

The use of augmented reality (AR) in educational content has been a topic of discussion in literature for a long time. Researchers Kesim and Ozarslan have found that incorporating AR into automated applications enhances the appeal and effectiveness of learning and teaching for students. Therefore, the purpose of this study is to qualitatively examine the benefits of using AR for learning the English language. () Kesim, M.; Ozarslan, Y., 2012)

The concept of enhancing the real world with virtual information was first used by various applications in the late 1960s and 1970s. Since the 1990s, big companies and corporations have been using augmented reality for training and visualization. Augmented reality is characterized by combining the real world with virtual elements, allowing for interaction and 3D registration.

It can also add or remove physical objects from view and replace them with other content. The effectiveness of augmented reality technology lies in its ability to integrate virtual objects, such as photos, videos, text, 3D models, and sound, into the real world. This technology allows users to bridge the gap between the real and virtual worlds. Augmented reality applications aim to provide users with an experience that closely resembles the real world. As a result, scholars have shown great interest in augmented reality technology as it has revolutionized the field of technology. (Zachary, W.; Ryder, J, 1997)

The acquisition of English language skills is crucial as it is the language of science, technology, economy, communication, and tourism, and writing skill is one of the essential skills necessary to master the English language because it works to consolidate information in mind and make the brain remember (Subaihat, & Bataineh, 2020).

And Küçük et al. conducted a study to determine how effective augmented reality is in changing the attitudes, cognitive loads, and achievements of English as foreign language (EFL) students. The results showed that secondary school students were satisfied with using augmented reality to learn English. Additionally, their anxiety levels decreased after using AR, and they had a positive attitude towards using augmented reality for English learning. Hsu conducted a study to examine the impact of augmented reality educational games on improving English vocabulary among third-grade students. Two different approaches were used: one focused on self-directed learning, and the other on task-based learning. The findings revealed that both groups of students had similar and high learning effectiveness. However, the students using the self-directed system reported a higher flow experience. (Küçük, S.; Kapakin, 2016)

Writing is one of the most critical skills necessary to master English. It is an essential tool for practicing the English language because it consolidates information in the mind and makes the brain remember and recall it when needed, so it is interconnected and supports other skills such as speaking, reading, and listening. The importance of writing skills increases when it is widely used for intercultural communication and understanding the required knowledge (Jabbarova, 2020).

Therefore, teaching writing skills in English requires considering many determinants based on how this language is taught, as it is supposed to be a motivating and exciting method for the student's motivation. Its objectives are defined and thoughtfully based on precise foundations and rules, especially in light of recent trends toward employing technical and digital developments in education (Mohammed, 2019).

So the problem of the study is evident in the main question of what is the role of augmented reality on the development of writing skills in English among primary school students.

The importance of the study becomes clear when reviewing some of the primary axes related to augmented reality and English writing skills. These axes are as follows: The definition of augmented reality, its importance in education, characteristics, and applications, as well as the study, deal with writing skills in terms of concept, skills, and reasons for students' low level of writing skills in English and the importance of employing augmented reality technologies in teaching writing skills in English. And the researcher used the descriptive method.

2-Study Literature.

1- Conceptual framework:

Augmented reality, or more, is simply a 3D technology that combines real and virtual reality, i.e. between a real object and a virtual object, and interacts with them in real time, while the individual is performing the real task. Hence, it is a composite display that combines the real scene that the user sees with a computer-generated virtual scene, which multiplies the scene with additional information, so that the user feels that he is interacting with the real world, not the virtual one, with the aim of improving the user's perception. Tom Caudell, a researcher at Boeing, first coined the term in 1990, along with colleague David Mizell, when he asked them to find a suitable alternative to the expensive wiring diagrams and devices used to direct electricians on the factory floor, as an alternative to plywood panels. Large, individually designed wiring instructions for each aircraft, they suggested using a device placed over the head to display the specific electrical wiring plans for each aircraft, through high-quality eye glasses technology, and displaying it on multi-purpose, reusable boards, through the computer system.

This led to the integration of technology and adding it to the physical reality, and this technological addition led to an increase in the interaction with sound and image, and it was better than the real reality with this increase. Augmented reality is used in many fields, such as tourism guidance, medicine, and construction. It is also used in virtual environments where the user interacts with the exhibits as if they were real in sound and image, and thus he is able to see and hear things and information as they happen in nature, using rich media, while watching the real reality. , where the virtual reality is superimposed on the real reality, and becomes a part of it, and interacts with it as if it interacts with the real, and the virtual is clearer than the real, as the augmented sites add information to the scene. (Schmalstieg, D. & Hollerer, T. (2016)

2- The concept of augmented reality technology:

This term is one of the modern terms that have appeared recently. By looking at the educational literature, many synonymous terms can be observed, including expanded reality, merged reality, augmented reality, and augmented reality. The term (augmented reality technology) was used as the most used term in the literature translated into Arabic.

It is: "a system represented by the integration of virtual reality environments with real environments through special techniques and methods, for example: the landing strips can be lit in front of planes in real airports, or the surgeon can see virtual information during the actual surgery that shows him the places that must be removed." ". Patkar, R., Singh, P., & Birji, S. (2013) In the light of the previous definitions of augmented reality technology, the researcher believes that augmented reality is a technology that allows the conversion of real two-dimensional images into virtual images and interactive three-dimensional graphics on the screen of smart devices, that is, it is a merger between real reality and digital information

And Kipper & Rampolla (2013) defined augmented reality as "a combination between the real world and virtual reality without abandoning the real reality on which information of all kinds is added and clarifications to information, and that it is a technology used by computers, tablets or cell phones," and a study (Özeren, & Top, 2023) points out. as a technology that allows simultaneous real mixing of digital content from real-world software and computer objects", and a study (Belda-Medina, & Marrahi-Gomez, 2023) defined it as a technology that integrates digital objects into actual reality (text, image, audio, video, 3D models), and provides users with an ideal interface that brings the real and virtual world together, enabling them to interact with virtual objects that are placed inside natural scenes. According to Hidayat, ET. al. (2021), augmented reality is defined as "a form of technology that enhances the real world through computer-generated content where augmented reality technology allows the addition of digital content seamlessly to perceive the user's perception of the real world where two- and three-dimensional shapes can be added, and audio, video, and text information files can be inserted.

In this study, the researcher defines it as an interactive technique based on adding information and virtual digital objects in three-dimensional forms in the real world using wired and wireless devices that enable the learner to interact with the content by stimulating his senses to develop the skill of writing.

3- Advantages of augmented reality:

- Use of augmented reality technology in education and within the classroom environment has many advantages. Anderson & Liarokapis (2014, P2) mentioned that among the advantages of augmented reality technology is that it:
- Provide the teacher with clear and concise information.
- The teacher was able to enter his information and data and communicate them in an easy way.
- Allows interaction between the teacher and the learner. It is easily expandable.
- Clear procedures between teacher and learner.
- Motivates learners to discover information on their own.
- Provides a suitable learning environment for multiple learning styles and different ages.
- It helps in teach academic subjects that the learner cannot easily comprehend except through realistic experiences: such as astronomy and geography.
- Encourages the learner and increases his creativity and his ability to imagine and comprehend.

4- The importance of augmented reality technology in education:

Research comparing students who have been exposed to augmented reality technology and students who have relied entirely on traditional study methods has shown that classrooms that relied on technology had more enjoyable and less stressful study experiences (Barreira et al., 2012), as (Özeren, S. & Top, 2023) emphasizes that employing augmented reality technologies in education provides support for thinking and helps students to build new forms of understanding, as the learner is active and influential. In the study of Yoon et al. (2017), we see that the use of augmented reality technology allowed students to understand the complex relationships between different variables, and it also increased students' ability to imagine and make educational science more positive.

5- Features of augmented reality technology:

Augmented reality technology has a set of characteristics, which are evident in the following points: (Anderson & Liarokapis, 2014, 2)

- Simultaneous interactive technology.
- Real reality merges with virtual reality.
- 3D technology.
- Provide the learner and the viewer with pictures and videos with information that merges with the image he is looking at.
- Make the educational process more interactive, communicative and active.
- A technology in which smart phones, computers and iPads are used.
- A technology that allows self-learning and individualization of education; to suit the abilities and preparations of the learner and his previous experience.
- Augmented reality technology provides immediate feedback, providing information, data, and forms expressing the image that the learner sees.
- Augmented reality technology satisfies the learners' passion and love for using smart phones and iPads, and helps attract their
- Provide clear and accurate information.
- The ability to enter information in an easy and effective way.
- The possibility of interaction between the two sides of the teacher and the learner.
- Despite its simplicity of use, it provides powerful information.
- Make complex procedures easy for users.
- Cost effective and easily expandable

Among the characteristics are that it is cost-effective and easily extensible, makes complex procedures easy for users, has the characteristic of smooth interaction between both teacher and learner in the educational situation, makes complex procedures transparent to learners and teachers, and enters information efficiently and effectively (Anderson & Liarokapis, 2014),

Augmented reality has several advantages, as Dunleavey et al. (2009) show that augmented reality helps learners engage in real-world explorations, motivates students to acquire skills better, and reliably shares data and information.

Karacan & Akoglu, 2021 mentioned the most important advantages of using augmented reality technology to increase the understanding of scientific content in specific topics, and augmented reality has a more effective impact on teaching students compared to the impact of other means, as it increases the enthusiasm of students when applying augmented reality technology in education. The researcher believes that one of the essential characteristics of augmented reality technology is to arouse the learner's senses, attract him and urge him to learn, and help the learner explain the concepts and the survival of the learning impact.

6- Types of augmented reality:

There are many types of augmented reality that have been mentioned in the educational literature, including the study of Patcar & Others, 2013, as follows:

- 1. Projection: It is the most common type of augmented reality, and it relies on the use of artificial images, such as projecting them onto the actual reality, to increase the percentage of details that the individual sees through the devices. So that the movement of the athlete is tracked in small particles for analysis and other purposes
- Shape recognition: This type of augmented reality is based on the principle of shape recognition by recognizing the angles, borders, and curves of a specific shape, such as a face or body. To provide additional virtual information to the object in front of it in real life.
- 3. Location: It is a method used to determine locations in conjunction with other software; Including: GPS challenge and triangulation technology, which takes the place of a guide in guiding the vehicle, ship, or individual to the point to be reached using hypothetical meeting points and applying them in reality.

4. The outline: The outline is a method of merging between augmented reality and virtual reality, and it is one of the types of augmented reality based on the principle of giving a person the possibility of merging the outlines of his body, or any chosen part of his body, with another virtual body, which gives the opportunity to deal, or touch or Capturing imaginary objects that do not exist in reality, and they are abundant in museums and educational scientific centers

7- Augmented Reality Applications in Education:

Augmented reality is a modern technology that is used for visualizing information. It has various applications in areas such as tourism, social interaction, communication, and education. With the rise of mobile devices and computers, augmented reality is now being used in traditional educational settings like schools and universities. This technology aligns well with constructivist and situated learning theories as it allows students to learn in a real-world context while being guided and supported in their learning processes.

Augmented reality enhances learning by providing visual representations of concepts and allowing students to explore complex phenomena and abstract ideas. It has been found to improve learning effectiveness, motivation, and the overall learning experience. There are many augmented reality applications and tools available for teaching and learning purposes. However, there are challenges in implementing augmented reality in education. These challenges include pedagogical, technological, and learning-related issues. Interaction, tracking technologies, displaying information, and creating realistic augmented reality experiences are some of the challenges that need to be addressed. Augmented reality applications can sometimes overwhelm learners with the amount of information, complex tasks, and different technological devices they need to use. (Acosta, J.L.B.; Navarro, S, 2014)

Through augmented reality applications, virtual lessons can be provided to students from anywhere in the world via the Internet in a fun and attention-grabbing way, through which students can simulate reality, and interact significantly with study materials, whether from within the educational institution or remotely, and the most important of these applications are skills training, discovery learning, augmented books, augmented reality-based story books, and Enhanced posters, language translations, school laboratories, and can also be used to transform paper books into interactive display platforms via smart devices (Shelton, & Hedley, 2002).

8- Requirements for the application of augmented reality in education:

Augmented Reality in English Learning Augmented reality is still in its early stages in the field of education, but several researchers suggest that it enhances the school curriculum. For instance, augmented reality can increase students' motivation to learn English, especially in reading skills. It also has the potential to greatly improve the educational system. Augmented reality is considered an effective tool for facilitating English learning and enhancing students' motivation. However, a study conducted by Lee found that traditional print reading was more beneficial for improving reading comprehension compared to augmented reality or digital reading. On the other hand, Rau et al. believe that using augmented reality applications can enhance reading skills and the teaching of reading among students. Barreira et al. have also shown that children exposed to augmented reality games have a better grasp of the language compared to those who only rely on traditional teaching methods. This further demonstrates the effectiveness of augmented reality in the educational field. (Barreira, J.; Bessa, M., 2012)

The success and effectiveness of employing augmented reality technology in teaching require other tasks for teachers in this digital age, such as the ability to adapt the curriculum and its requirements for teaching using modern technologies and to have the ability to visualize the inherent capabilities and requirements for teaching using modern technologies and to have the ability to visualize the capabilities inherent in technologies and know how to integrate them into teaching (Hidayat et al., 2021), and in light of this, the study (Karacan, & Akoglu, 2021)

that employing augmented reality in education requires educating teachers about the importance of employing augmented reality in the educational process, using appropriate assessments of technology taking into account students' levels, and providing technical educational content suitable for all levels and ages.

The second topic: Writing skill.

1- The importance of writing:

Writing is one of the most important means of communication that enables a person to write down his thoughts and feelings, and to express his feelings and thoughts. Hence, writing is superior to speech, as both are a missionary communication tool, and writing is unique in survival and constancy (Najmuddin and Othman, 2014, p. 4). Al-Najjar (2011, p. 41)

Believes that writing has multiple sources. It may be a transfer of others' ideas by listening, translating thought, refining sayings, translating information, describing a situation or an event, and it is therefore a stage that comes after reading, and spelling has a high status in that, because it is a preserved record. For that information, orthographic writing is a method invented by man in civilized stages to translate and record what is in himself, to break the temporal and spatial distances. If there is a spelling error and inaccuracy in the written drawing, then this leads to a change in the meaning and significance and distortion of the facts that the writer wanted according to a specific system.

And Ismail (2011, p. 127) believes that writing is a literary and social activity, as it is the way in which the individual conveys his thoughts, feelings, and needs in sound language, and beautiful illustration, and correct writing is the purpose of language learning, as it is a means of communication between the individual and the group, so by writing the individual can make them understand what He wants, and this communication will not be of any use if it is not correct and accurate, as it depends on the quality and correctness of the writing. Both Abu Jamous and Youssef (2013, p. 3)

Pointed out the importance of writing, which has a major role in developing social communication skills and facilitating life transactions that are indispensable to one. Writing has an important role in crystallizing the student's thought, and affects his academic success, as it is an urgent need. It accompanies it in all educational stages, and if the student makes a mistake in writing or expressing it, his result will be weak and this will negatively affect his academic achievement. Using previous information and knowledge, linking and coordinating them intelligently, and good writing gives an image of good thought, as the quality of writing indicates good thinking and sound language.

On the other hand, Horton, 2017, p. 97)) to the importance of writing and the role of rapid learning in that, as each of us needs to write in different areas such as business and social communication, as this requires you to put your ideas, proposals, and goals on paper

2- The concept of writing skill:

(Mohammed, 2019) defined the skill of writing as "a linguistic skill that enables its owner to convert his ideas and information into written text to save, publish, and communicate with others, and it is a skill that depends on talent, training, and practice, and some people have the ability to translate ideas in a creative way that attracts the reader to dive into their letters without boredom or boredom, and this does not mean that those who do not have the precious talent will not be able to practice this skill with the same ability, as training and practice are enough to make anyone a brilliant writer in the world books," defined as "the art of expressing thoughts, feelings and points of view using language symbols as a medium to transmit and present them to others in the form of a subject written by" (Silin, & Chan, 2015).

3- Writing Skills:

Writing skills include the performances that the student performs while writing to make his writing accurate, correct and coherent, and trains students to write correctly, and this requires focusing on three things: The student's ability to write correctly according to spelling rules. And mastery of calligraphy during its organization, coordination, and beauty. And his ability to express his ideas clearly and accurately. The student must be able to draw the letters correctly; otherwise, the letters differ and are impossible to read.

To be able to write words in the way that the linguists know, otherwise, it is not possible to translate them into their meanings and to be able to choose words and put them in a particular system; otherwise, it is impossible to understand the meaning and ideas (Bhavani, & Shankar, 2023).

4- Writing goals:

Al-Raba'a (2015, p. 7) referred to a group of the most important goals of learning to write, which are as follows: Creating the ability to express sound, clear and in-depth in the learner, and this general goal requires the achievement of a set of special goals. Giving the learner the ability to express thoughts, feelings, emotions and emotions in a refined, sublime and influential way, with broad horizons and creativity.

- Providing the learner with the ability to express in a sound language that takes into account the rules of use of the synthetic, morphological and semantic language systems.
- Giving the learner the ability to practice logical thinking in presenting and sequencing his ideas and proving them to be influential in the same recipient.
- Developing the learner's ability to face different life situations, such as writing a greeting card or a letter to a friend, or writing notes and thoughts.

It can be concluded that one of the goals of writing is to work on creating the ability for sound and in-depth expression, which is one of the most important goals of writing. The researcher also sees the importance of training the student on creative writing and creative thinking, not just logical thinking.

5- Writing requirements:

Writing is one of the basic dimensions of the cognitive dimension, and it is the process of drawing letters or words based on both form and sound to express through them the human self, including concepts and imaginations. Children may experience difficulties in writing that may be due to problems in visual perception and discrimination, and problems in perceiving visual spatial relationships, in addition to the ability to address spatial relationships represented by a disorder of spatial motor ability, and a disorder of visual motor coordination (Wakley and Shawadra, 2015, p. 508).

6- Problems of poor writing skills in English for female students:

Ashour (2014, p. 227) attributes the written weakness of some male and female students to the lack of intellectual and linguistic wealth, as he does not have the ability to arrange his thoughts and link them, in addition to the disorder of style and twisting of his phrases. He added that there are many factors that can be attributed to the students' weakness in writing, and these factors can be listed as follows: The student's lack of linguistic yield, as well as one of the reasons for isolating the written expression from the rest of the language branches, and he also believes that the teacher's failure to follow up on the written works, especially the neglect of some of them to evaluate the written subjects of the students, is one of the reasons. Perhaps the large number of students in the class, and the many classes assigned to the teacher, are two other reasons that limit the ability of the teacher to carry out his duty in expression lessons and others. Also, one of the reasons is the teaching methods used that do not agree with the different learning styles, and also the lack of reading. It is an established fact that the close link between reading and expression

7- Treatment of writing difficulties:

Writing difficulties occur as a result of multiple subjective, objective, environmental and genetic causes, and as a result of the multiplicity of causes leading to writing difficulties, the treatment is determined according to the reason that led to the difficulty in writing, so there are many treatment methods, namely (Wakli and Shawadra, 2015, p. 512): 1- Medical treatment. 2- Movement therapy. 3- Improving visual perception. 4- Improving visual memory.

8- Writing stages:

The writing process requires going through five interrelated and sequential basic stages. Correct writing can only be reached by going through these stages, which should be relied upon in teaching students writing skills. These stages are (Al-Mutlaq and Muqabla, 2016, p. 202):

- 1. The planning stage: It is the first stage in which ideas are developed, and it usually takes more time. Information, analysis and organization to display it logically correctly during writing.
- 2. . Composing stage: It is the actual writing stage that contains procedures for expressing ideas that were identified in the first stage. This stage reflects the student's linguistic and mental abilities and his ability to choose appropriate words, and divides the ideas of the topic into a group of interrelated paragraphs that express the intended meaning.
- 3. Revision stage: In this stage, the student revises what he has written several times. Reading at this stage is a critical reading in order to determine the quality of the form and content of the writing. This stage also includes correcting the grammatical and spelling errors in the writing, in addition to amending ideas. Meanings, punctuation and other factors that affect the quality of writing.
- 4. The editing stage: It is considered one of the most important stages of writing, as this stage includes reconsidering and revising what has been written, where the writing is re-read and all errors contained therein are corrected, whether these errors are in style, words, grammar and spelling, in addition to punctuation.

5. Publication stage: This stage is the last stage, where the student presents the topic he has written to the students or the teacher by reading it in the classroom or the school radio or publishing it in the school magazine

9- Reasons for students' low levels of English writing:

Many researchers have tried to research the reasons for the low levels of students in writing and a large number of their mistakes, and the most prominent of these reasons have emerged in their studies, which can be summarized as follows (Al-Ahdal et al., 2021) and (Khasawneh, 2021):

- Motivation towards writing: Researchers see a low level of students' motivation towards writing; a trait that generally
 negatively affects all academic aspects, including writing skills, and this may be due to the absence of an element of suspense
 and excitement in the writing process.
- Training methods used by the teacher: The teacher has a significant role in training the student through his professional, personal, cognitive, and social competencies. Therefore, the teacher must devise procedures and tools to develop the readiness to write first by developing positive attitudes towards the school, the teacher, the book, the language, and its skills, including writing skills.
- Teaching strategies: The teaching strategies adopted have a role in making the student acquire basic academic skills, especially reading and writing, as the teacher must have sufficient skill to choose and apply the training strategy that suits the educational situation and suits the students' abilities, potentials and needs, which leads to the student's interaction with him
- Writing is associated with more than one sense: the student uses the hand, eye, and ear simultaneously, and therefore it depends on the visual and auditory muscular synergy of the student.
- Foreign language is the second language after mother tongue: students in primary school need help learning English language skills, primarily written skills because it is a new language and they are not used to using it as a mother tongue.

10- The importance of modern technologies in teaching writing skills:

The skill of writing needs a lot of mental, physical and psychological processes, it includes a considerable range of organized mental activities, which can be described as steps that pass through the human mind, and move synergistically to the hand and eye during the production of writing, and the human being performs it at a tremendous speed despite passing through these steps in a sequential and organized manner, and the strategies of teaching writing in the latter half of the last century and the beginning of this century have taken a prominent place in educational and psychological research, especially that part related to understanding

The nature of this skill, its components, requirements and ways to develop it, and in light of the entry of modern educational technologies in the field of education in general and language learning in particular, talk about augmented reality technologies came as one of the products of technology in the educational field, and it was essential to benefit from these technologies, especially in teaching points and skills in which students are deficiencies, and based on the importance of these innovations in addressing the solution of many educational and educational problems, it is appropriate to invest this technology To provide students with language skills and abilities in their various forms and levels, and many studies have been conducted in this field,

where the study of Istianah, (2019) found that the writing skill of students has improved, which means that the application of Padlet (an augmented reality technology) is able to improve students' writing skills, as found by the study of Saidin, el. al. (2015) that augmented reality technologies generally have greater positive possibilities and advantages than traditional teaching methods.

The study by Ambrose & Palpanathan (2017) recommended the need to employ modern digital technologies in teaching writing skills due to their positive role in giving fun to education and thus increasing motivation and integration into the educational process.

3-Conclusion.

The study reviewed many of the primary axes related to augmented reality technology and writing skills in English, and the literature pointed to the definition of augmented reality, its importance, advantages and characteristics, and the requirements for its employment, as the literature referred to the concept of writer's skills and the classification of writing skills and reviewed the literature on the reasons for the low level of students in writing skills in English

the literature showed the importance of employing modern technologies in teaching writer's skills in English, and the review revealed that employing reality techniques Augmented in education Many advantages appear for both teachers and students, as they

increase students' motivation for education as they add an atmosphere of fun to the educational process and change the atmosphere of rigidity and monotony in education. Therefore

the employment of augmented reality technologies in education limits the most critical obstacles to teaching writing skills in English.and the reasons for their decline, which is traditional methods and strategies in education, and low motivation to learn, and the conclusion of the study is that augmented reality technologies enhance students' motivation to learn and increase From the processes of attention and concentration, and thus increase the level of cognitive achievement, and the techniques of scientific application of writing skills contribute and therefore they focus on the learner and enhance self-learning among students, and

Thus they help learners develop thinking skills, enhance learners' independence, help learners feel more confident, increaselearners' motivation to learn writing skills, and reduce obstacles to learning writing skills.

4-References.

- Abu Jamous, Abdel Karim, and Youssef, Afaf. (2013). the effect of an educational program in writing to improve the writing skills of the eighth grade female students in the first district of Irbid. An-Najah University Research Journal, 28(5), 1072-1106.
- Acosta, J.L.B.; Navarro, S.M.; Gesa, R.F.; Graf, S. Augmented reality trends in education: A systematic review of research and applications. J. Educ. Technol. Soc. 2014, 17, 133–149
- Acosta, J.L.B.; Navarro, S.M.; Gesa, R.F.; Graf, S. Augmented reality trends in education: A systematic review of research and applications. J. Educ. Technol. Soc. 2014, 17, 133–149
- Ahmed, M. (2016). Using Facebook to Develop Grammar Discussion and Writing Skills in English as a Foreign Language for University Students. Sino-Us English Teaching, 13(12), 932–952.
- Al-Ahdal, A. A. M. H., & Abduh, M. Y. M. (2021). English Writing Proficiency and Apprehensions among Saudi College Students: Facts and Remedies. TESOL international journal, 16(1), 34-56.
- Al-Mutlaq, faith, and interview, victory. (2016). the impact of writing inputs on improving the essay writing skills of first year secondary school students. Al-Manara Journal for Research and Studies, 22(3), 199-230.
- Al-Raba'a, Ibrahim. (2015). Writing skill. Jordan: Aloka Publishing Hous
- Ambrose, R., & Palpanathan, Sh. (2017). Investing the Effectiveness of Ambrose, R., & Computer-Assisted Language Learning (CALL) Using Google Documents in Enhancing Writing- A study on Senior 1 Students in a Chinese Independent High School. IAFOR Journal, 3(2), 85-112
- Anderson, E & Liarokapis, F. (2014). Using Augmented Reality as Medium to Assist Teaching in Higher Education, Coventry University, UK.
- Ashour, Ratib. (2014). Written expression skills in Arabic reading books for basic stage students in Jordan. Journal of Al-Quds Open University for Research and Studies, 1 (33), 73-104.
- Barreira, J. (2012). MOW: Augmented Reality game to learn words in different languages: Case study: Learning English names of animals in elementary school. In Information Systems and Technologies (CISTI), 2012 7th Iberian Conference on Information Systems and Technologies (pp. 1- 6). Madrid:
- Barreira, J.; Bessa, M.; Pereira, L.C.; Adão, T.; Peres, E.; Magalhães, L. MOW: Augmented Reality game to learn words in different languages: Case study: Learning English names of animals in elementary school. In Proceedings of the 7th Iberian Conference on Information Systems and Technologies (CISTI 2012), Madrid, Spain, 20–23 June 2012; pp. 1–6
- Barreira, J.; Bessa, M.; Pereira, L.C.; Adão, T.; Peres, E.; Magalhães, L. MOW: Augmented Reality game to learn words in different languages: Case study: Learning English names of animals in elementary school. In Proceedings of the 7th Iberian Conference on Information Systems and Technologies (CISTI 2012), Madrid, Spain, 20–23 June 2012; pp. 1–6.
- Belda-Medina, J., & Marrahi-Gomez, V. (2023). The Impact of Augmented Reality (AR) on Vocabulary Acquisition and Student Motivation. Electronics, 12(3), 749.
- Bhavani, C. H., & Shankar, B. (2023). A STUDY ON THE IMPACT OF GRAMITICAL ON ENGLISH WRITTEN SKILLS. Journal of Engineering Sciences, 14(01).
- Carpenter, Fakhri. (2011). Technical foundations of writing and expression. Amman: Dar Al-Safa for publication and distribution.
- Chau, Clement L. (2014). Positive Technological Development for Young Children in the Context of Children's Mobile Apps. Unpublished Dissertation. Tufts University. D Ph., on https://ase.tufts.edu/DevTech/resources/Theses/CChau_2014.pdfCypress, P.; Giglioli, I.A.C.; Raya, M.A.; Riva, G. The past, present, and future of virtual and augmented reality research. Front. Psychol. 2018, 9, 2086:A network and cluster analysis of the literature

- Cipresso, P.; Giglioli, I.A.C.; Raya, M.A.; Riva, G. The past, present, and future of virtual and augmented reality research. Front. Psychol. 2018, 9, 2086:A network and cluster analysis of the literature
- Dunleavey, M., Dede, C., & Mitchell, R. (2009). Affordances and Limitations of Immersive Participatory Augmented Reality Simulations for Teaching and Learning. Journal of Science Education and Technology, 18(12): 7–22.
- Dunleavy, M.; Dede, C. Augmented reality teaching and learning. In Handbook of Research on Educational Communications and Technology; Springer: New York, NY, USA, 2014; pp. 735–745
- Geng, X.; Yamada, M. An augmented reality learning system for Japanese compound verbs: Study of learning performance and cognitive load. Smart Learn. Environ. 2020, 7, 1–19
- Hendy, Irene. (2019). The effectiveness of using accelerated learning to teach art education on the development of artistic skills and the quality of the artistic product among the mentally handicapped in the first preparatory grade. Journal of Research in the Fields of Specific Education, 1 (22), 233-267.
- Hidayat, H., Sukmawarti, S., & Suwanto, S. (2021). The application of augmented reality in elementary school education. Research, Society and Development, 10(3), 1-6.
- Horton, J. (2017). Accelerated Learning Out —Think Language Teaching. New York: Oxford University Press.
- Ismail, eloquent. (2011). Strategies for teaching Arabic: theoretical frameworks and practical applications, 1st edition. Amman: Curriculum House
- Jabbarova, A. (2020). The System of Exercises for Teaching Essay Writing In English, Applied Science of Higher Education. Архив Научных Публикаций JSPI.
- Karacan, C. G., & Akoglu, K. (2021). Educational augmented reality technology for language learning and teaching: A comprehensive review. Shanlax International Journal of Education, 9(2), 68-79.
- Kesim, M.; Ozarslan, Y. Augmented reality in education: Current technologies and the potential for education. Procedia-Soc Behave. Sci. 2012, 47, 297–302
- Kesim, M.; Ozarslan, Y. Augmented reality in education: Current technologies and the potential for education. Procedia-Soc Behav. Sci. 2012, 47, 297—302.
- Khasawneh, M. A. S. (2021). Language skills and their relationship to learning difficulties in English language from the students' point of view. Science and Education, 2(9), 261-272. Kipper, G.; Rampolla, J. (2013). Augmented reality: An Emerging Technologies Guide to AR. Elsevier, USA
- Küçük, S.; Kapakin, S.; Gökta,s, Y. Learning anatomy via mobile augmented reality: Effects on achievement and cognitive load. Anat. Sci. Educ. 2016, 9, 411–421
- Küçük, S.; Kapakin, S.; Gökta, S. Y. Learning anatomy via mobile augmented reality: Effects on achievement and cognitive load. Anat. Sci. Educ. 2016, 9, 411–421
- Mohammed, A. E. H. E. (2019). Investigating EFL students' problems in writing skills at secondary level a case Study of EFL Students at Secondary Schools-Gezira State-Hasaheisa. Basic Education College Magazine For Educational and Humanities Sciences, (42).
- Najm Al-Din, Mubarak, and Othman, Harbiye. (2013). Writing skills and their applications. Journal of Islamic Sciences and Research, 1(6), 1-20.
- Özeren, S., & Top, E. (2023). The effects of Augmented Reality applications on the academic achievement and motivation of secondary school students. Malaysian Online Journal of Educational Technology, 11(1), 25-40.
- Saidin, N. F., Halim, N. D. A., & Yahaya, N. (2015). A review of research on augmented reality in education: Advantages and applications. International education studies, 8(13), 1-8. Shelton, B., & Hedley, N. (2002). Using Augmented Reality for Teaching Earth-Sun Relationships to Undergraduate Geography Students. In the First IEEE International Augmented Reality Toolkit Workshop, Darmstadt, Germany, and IEEE Catalog Number: 02EX632 ISBN: 0-7803-7680-3.
- Silin, Y., & Chan, A. (2015). Effectiveness of the English writing process for post-secondary school students. International Journal of English Language Education, 3(1), 254-267. Subaihat, T. A., & Bataineh, A. M. (2020). The effect of using iPod technology on the writing skill of learners of English as a foreign language. Journal of Educational and Psychological Sciences, 4(6), 171-162.
- Tulgar, A.T.; Yilmaz, R.M.; Topu, F.B. Research Trends on the Use of Augmented Reality Technology in Teaching English as a Foreign Language. Particip.
 Educ. Res. 2022, 9, 76–104
- Wakli, Badia, and Shawdara, Samah. (2018). Difficulty writing between diagnosis and treatment. Journal of Humanities, 1(9), 506-515.
- Yoon, S., Anderson, E., Lin, J., & Elinich, K. (2017). How augmented reality enables conceptual understanding of challenging science content. Journal of Educational Technology & Society, 20(1), 156-168.
- Zachary, W.; Ryder, J.; Hicinbothom, J.; Bracken, K. The use of executable cognitive models in simulation-based intelligent embedded training. In
 Proceedings of the Human Factors and Ergonomics Society Annual Meeting, Albuquerque, NM, USA September 1997; SAGE Publications: New York,
 NY, USA, 1997; Volume 41, pp. 1118–1122